



## AIR QUALITY TITLE V PERMIT

Permit No.	Effective Date	Expiration Date	Modification Date(s)	Replaces Permit No(s)
14-02V-567	September 2, 2014	September 2, 2019	April 20, 2016	14-01V-567

In accordance with the provisions of the Mecklenburg County Air Pollution Control Ordinance, and by the authority granted under the North Carolina General Statute (NCGS) Chapter 143, Article 21B, and until such time as this permit expires or is modified or revoked, the Permittee is hereby authorized to construct/operate emission sources and control devices as outlined in Parts 1 and 2 of this permit. The purpose of this permit is to assure compliance with the requirements of Title V of the Clean Air Act (CAA) and 40 CFR Part 70.

**Permittee Name:** Gerdau Ameristeel US, Inc.  
**Site Name (if different):** Gerdau Long Steel North America – Charlotte Mill

**Permitted Facility Location:** 6601 Lakeview Road  
**City, State, Zip:** Charlotte, NC 28269

**Facility Mailing Address:** P.O. Box 481980  
**City, State, Zip:** Charlotte, NC 28269

**Primary SIC Code:** 3312

**Renewal Application Due:** September 2, 2018

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Program Manager, Air Quality Program

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# **PART 1**

## **Facility Conditions and Limitations**

# **PART 1**

## **Facility Conditions and Limitations**

The entire facility is subject to the conditions and limitations contained in Part 1 (below). The facility shall comply with all applicable Air Quality rules and regulations whether or not these regulations are specifically identified in the permit.

### **A. LOCAL AND FEDERAL REQUIREMENTS**

Mecklenburg County Air Quality (MCAQ) and the United States Environmental Protection Agency (EPA) have the authority to enforce the terms, conditions, and limitations contained in this section.

### **ADMINISTRATIVE PROVISIONS**

#### **A-1. Applicability**

The facility shall be operated in accordance with the Mecklenburg County Air Pollution Control Ordinance (MCAPCO) **Regulations 1.5211 - “Applicability” and 1.5502 - “Applicability”**. An owner or operator shall have received a permit from the Department and shall comply with the conditions of such permit before constructing, modifying or operating any air pollution source or entering into a contract to construct or install any air cleaning device. This permit does not relieve the facility from the responsibility of acquiring any other permits that may be required.

#### **A-2. Permit Application**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(16)**, the construction and operation of emission sources and control devices listed in this permit shall be in accordance with all plans, specifications, operating parameters, and other information submitted and which is the basis for the issuance of this permit. The facility shall comply with all applicable Air Quality rules and regulations whether or not these rules and regulations are included as part of the permit.

Applications shall be submitted in accordance with **MCAPCO Regulations 1.5212 - “Applications”, 1.5505 - “Application Submittal Content”, and 1.5507 - “Applications”** and shall be accompanied by the appropriate fee as listed in **MCAPCO Regulation 1.5231 - “Air Quality Fees”**. The owner or operator of a new or modified facility may choose to obtain a construction and operation permit pursuant to **MCAPCO Regulation 1.5504 - “Option for Obtaining Construction and Operation Permit”**.

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

**A-3. General Duties and Powers of the Director**

In accordance with **MCAPCO Regulation 1.5104 - “General Duties and Powers of the Director, with Approval of the Board”**, the Director or his authorized representative may request performance testing of any emission source to ensure compliance.

**A-4. Confidential Information**

In accordance with **MCAPCO Regulation 1.5217 - “Confidential Information”**, the Permittee may request that submitted information be treated as confidential. The Permittee must make this request at the time of submittal and include both confidential and public copies of the information for MCAQ files.

**A-5. Retention of Permit**

In accordance with **MCAPCO Regulation 1.5219 - “Retention of Permit at Permitted Facility”**, a copy of this permit shall be retained at the facility.

**A-6. Property Rights**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(8)**, this permit does not convey property rights of any sort, or any exclusive privileges.

**A-7. Annual Fee Payment**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(10)**, the Permittee shall pay fees required under **MCAPCO Regulation 1.5231 - “Air Quality Fees”**.

**A-8. Inspection and Entry**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Paragraph (l)**, the Permittee shall allow authorized representatives of MCAQ and the EPA to:

- a. enter the Permittee’s premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
- b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- c. inspect, at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. sample or monitor substances or parameters, at reasonable times and using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements.

## **PERMIT CHANGES**

### **A-9. Changes Not Requiring a Permit Modification**

a. Section 502(b)(10) Changes:

Changes allowed under Section 502(b)(10) of the federal Clean Air Act are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements. In accordance with **MCAPCO Regulation 1.5523 - “Changes Not Requiring Permit Revisions”** Paragraph (a), the Permittee may make changes without having this permit revised if:

1. the changes are not a modification as defined under **MCAPCO Article 2.0000** or Title I of the federal Clean Air Act;
2. the changes do not cause the allowable emissions under the permit to be exceeded;
3. the Permittee notifies the Director and EPA with written notification as described in **MCAPCO Regulation 1.5523- “Changes Not Requiring Permit Revisions”** Subparagraph (a)(2) at least seven days before the change is made; and,
4. the Permittee shall attach the notice to the relevant permit.

b. Off-Permit Changes:

In accordance with **MCAPCO Regulation 1.5523 - “Changes Not Requiring Permit Revisions”** Paragraph (b), the Permittee may make changes in his operation or emissions without revising the permit if:

1. the change affects only insignificant activities and the activities remain insignificant after the change, or
2. the change is not covered under any applicable requirement.

c. Emissions Trading:

To the extent that emissions trading is allowed under **MCAPCO Article 2.0000**, emissions trading shall be allowed without permit revisions provided that:

1. all applicable requirements are met,
2. the Permittee complies with all terms and conditions of the permit in making the emissions trade,
3. the Permittee notifies the Director and EPA with written notification as described in **MCAPCO Regulation 1.5523 - “Changes Not Requiring Permit Revisions”** Subparagraph (c)(3) at least seven days before making the emissions trade.

### **A-10. Permit Modifications and Administrative Amendments**

a. Administrative Permit Amendments shall be made in accordance with **MCAPCO Regulation 1.5514 - “Administrative Permit Amendments”**.

b. Transfer of Ownership or Operation:

Transfer of ownership or operations shall be made in accordance with **MCAPCO Regulation 1.5524 - “Ownership Change”** which states that applications for ownership change shall contain information as required in **MCAPCO Regulation 1.5505 - “Application Submittal Content” Paragraph (4)** and shall follow the procedures described in **MCAPCO Regulation 1.5212 - “Applications” Paragraph (e)**.

c. Minor Permit Modifications shall be made in accordance with **MCAPCO Regulation 1.5515 - “Minor Permit Modifications”**.



- d. Significant Permit Modifications shall be made in accordance with **MCAPCO Regulation 1.5516 - “Significant Permit Modification”**.

#### **A-11. Reopening for Cause**

In accordance with **MCAPCO Regulation 1.5517 - “Reopening for Cause”, Paragraph (a)**, a permit shall be reopened and revised under the following circumstances:

- a. additional requirements become applicable to a facility with a remaining permit term of three or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement, and no such reopening is required if the effective date of requirement is later than the expiration date of this permit;
- b. MCAQ or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
- c. MCAQ or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

#### **A-12. Termination, Modification, Revocation of Permits**

A permit may be terminated, revoked, or modified as outlined in **MCAPCO Regulations 1.5232 - “Issuance, Revocation, and Enforcement of Permits”, 1.5231 - “Air Quality Fees”, and/or 1.5519 - “Termination, Modification, Revocation of Permits”**.

In accordance with the above-referenced regulations, MCAQ may terminate, modify, or revoke and reissue a permit if:

- a. the information contained in the application or presented in support thereof is determined to be incorrect;
- b. the regulations or conditions under which the permit or permit renewal was granted have changed;
- c. violations of conditions contained in the permit have occurred;
- d. construction of the permitted equipment does not commence within 18 months of permit issuance or, once construction has begun, it ceases prior to completion for a period of 18 consecutive months;
- e. operation of a permitted facility or process ceases permitted activities for a period of 18 consecutive months;
- f. the permit holder fails to pay fees required within 30 days after being billed;
- g. the Permittee refuses to allow the Director or his authorized representative to enter the premises where a source of emissions is located, have access to records required to be kept under the terms and conditions of the permit, inspect any source of emissions, control equipment, and monitoring equipment or methods required in the permit, or collect samples from any emission source; or,
- h. the EPA requests that the permit be revoked under **40 CFR Part 70.7 Paragraph (f) or (g)**.

#### **A-13. Permit Renewal and Expiration**

In accordance with **MCAPCO Regulation 1.5513 - “Permit Renewal and Expiration”**, permit expiration terminates the facility’s right to operate unless a complete renewal application has been submitted at least nine months before the date of permit expiration. To ensure the application is timely and complete, the *renewal application shall be submitted one year prior to the permit expiration date*. The renewal application should include the complete application forms for all permitted equipment and any modifications. Permits being renewed are subject to the procedural requirements of **MCAPCO Section 1.5500 - “Title V Procedures”**, including those for

public participation and affected States and EPA review. Upon receipt of a timely and complete application for renewal, the Permittee may continue to operate under the conditions of this permit, subject to final action by MCAQ on the renewal application. If a complete renewal application is not received as required, the permit will expire at the end of its term.

## **NOTIFICATIONS AND REPORTS**

### **A-14. Commencement of Operation**

The facility shall be operated in accordance with **MCAPCO Regulation 1.5214 - “Commencement of Operation”**. Upon completion of construction, alteration or installation pursuant to this permit, the permit holder shall notify the Director in writing of such completion and of the holder’s intent to commence operation.

### **A-15. Malfunction and Excess Emissions Provisions:**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content”** Subparagraph (f)(2), the Permittee shall report by the next business day; malfunctions, emergencies, and other upset conditions as prescribed in **MCAPCO Regulations 2.0524 - “New Source Performance Standards”**, **2.0535 - “Excess Emissions Reporting and Malfunctions”** (except Paragraph (g)), **2.1110 - “National Emission Standards for Hazardous Air Pollutants”**, or **2.1111 - “Maximum Achievable Control Technology”**.

In accordance with **MCAPCO Regulation 2.0535**, the Director shall be notified by 9:00 am of the Department’s next business day after the permittee becomes aware of malfunctions, emergencies and upset conditions that result in excess emissions lasting longer than four (4) hours.

The permittee shall report to the Director within two business days after becoming aware of any deviation not covered by **MCAPCO Regulations 2.0524 - “New Source Performance Standards”**, **2.0535 - “Excess Emissions Reporting and Malfunctions”** (except Paragraph (g)), **2.1110 - “National Emission Standards for Hazardous Air Pollutants”**, or **2.1111 - “Maximum Achievable Control Technology”**.

All reports of deviations and excess emissions shall be certified by a responsible official. After a malfunction or breakdown has been corrected, the Director may require the source to conduct a performance test to demonstrate compliance.

*MCAPCO Regulation 2.0535 – “Excess Emissions Reporting and Malfunctions” Paragraph (g) is not a SIP enforceable provision and therefore the conditions and allowances allowed therein are considered as Local only requirements (see Facility Condition and Limitation No. B-8).*

**A-16. Monitoring Data Recordkeeping and Reporting**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Paragraph (f):**

- a. The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. (Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit.)
- b. The Permittee shall submit reports of any required monitoring as listed in Part 2 of this Permit to MCAQ at least every six months. The reports should include a summary of data and observations, identification of any deviations from normal operating parameters, and any corrective action taken to return the monitored emission source to normal operating conditions. Normal operating parameters shall be determined from information on file and any operating ranges listed in Part 2 of this permit.

**A-17. Annual Emissions Reporting**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(14)**, the Permittee shall submit annual reports of actual and potential emissions as required under **MCAPCO Regulation 1.5111 - “General Recordkeeping, Reporting and Monitoring Requirements”** and as specified in the Permit.

**A-18. Duty to Provide Information**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(9)**, the Permittee shall furnish to MCAQ, in a timely manner, any reasonable information that MCAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The Permittee shall furnish to MCAQ copies of records required to be kept by the permit when such copies are requested by the Director.

**A-19. Submissions**

In accordance with **MCAPCO Section 1.5500 - “Title V Procedures”**, any document submitted shall be certified by a responsible corporate official as being true, accurate and complete. Reports, test data, monitoring data, notifications and requests for renewal shall be submitted to:

Director  
Mecklenburg County Air Quality  
2145 Suttle Avenue  
Charlotte, North Carolina 28208-5237

**A-20. Information Submittal**

The owner or operator shall submit all reports or information as may be required by MCAQ.

## **OPERATIONAL REQUIREMENTS/STANDARDS**

### **A-21. Equipment and Control Device Operation**

Unless otherwise specified by this permit, no equipment may be operated without the concurrent operation of the permitted air emissions control devices.

### **A-22. National Emission Standards for Hazardous Air Pollutants**

The facility shall be operated in accordance with **MCAPCO Regulation 2.1110 - “National Emission Standards for Hazardous Air Pollutants”**, which refers to Title 40 of the Code of Federal Regulations Part 61.140 to 61.157, Subpart M, National Emission Standard for Asbestos, when conducting any renovation or demolition activities.

### **A-23. Visible Emissions**

The facility shall be operated in accordance with **MCAPCO Regulation 1.5107 - “Control and Prohibition of Visible Emissions”**, such that visible emissions shall not be more than 20% opacity for an aggregate of more than six (6) minutes in any one hour or more than twenty (20) minutes in any 24-hour period.

Facilities subject to a visible emission standard as specified by applicability to **MCAPCO Regulations 2.0524 - “New Source Performance Standards”**, or **2.1110 - “National Emission Standards for Hazardous Air Pollutants”**, shall comply with the more stringent standard, but, in no case shall the source’s visible emissions exceed 20% opacity.

### **A-24. Dust and Related Material**

The facility shall be operated in accordance with **MCAPCO Regulation 1.5108 - “Dust and Related Material”**, such that dust shall not be discharged into the atmosphere in such quantities that the ambient air quality standards are exceeded at the property line or in such quantities or of such toxic or corrosive nature that may be injurious to humans or animals or may cause damage to the property of others.

### **A-25. Fugitive Dust Emission Sources**

As required by **MCAPCO Regulation 2.0540 - “Particulates from Fugitive Dust Emission Sources”**, the permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints.

- a. If fugitive dust emissions cause or contribute to substantive complaints, the permittee shall:
  1. within 30 days upon receipt of written notification from the Director of a second substantive complaint in a 12-month period, submit to the Director a written report that includes the identification of the probable source(s) of the fugitive dust emissions causing complaints and what immediate measures can be made to abate the fugitive emissions;
  2. within 60 days of the initial report submitted under Subparagraph (1) of this Paragraph, submit to the Director a control plan as described in Paragraph (f) of this Regulation; and
  3. within 30 days after the Director approves the plan, be in compliance with the plan.

- b. The Director may require that the permittee develop and submit a fugitive dust control plan as described in MCAPCO 2.0540(f) if:
  - 1. ambient air quality measurements or dispersion modeling as provided in Paragraph (e) of MCAPCO Regulation 2.1106 – “Determination of Ambient Air Concentrations” show violation or potential for a violation of an ambient air quality standard for particulates in MCAPCO Section 2.0400 - “Ambient Air Quality Standards”; or
  - 2. if MCAQ observes excessive fugitive dust emissions from the facility beyond the property boundaries for six minutes in any one hour using Reference Method 22 in 40 CFR 60, Appendix A.

#### **A-26. Protection of Stratospheric Ozone**

In accordance with **MCAPCO Regulation 1.5501 - “Purpose of Section and Requirement for a Permit” Paragraph (e)**, the Permittee is subject to all the applicable requirements and standards for recycling and emissions reduction pursuant to:

- a. **40 CFR Part 82, Subpart F - “Recycling and Emissions Reduction”** including the following:
  - 1. persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant **40 CFR 82.156**;
  - 2. equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to **40 CFR 82.158**;
  - 3. persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to **40 CFR 82.161**;
  - 4. persons disposing of small appliances, motor vehicle air conditioners (MVACs), and MVAC-like appliances (as defined in **40 CFR 82.152**) must comply with recordkeeping requirements pursuant to **40 CFR 82.166**;
  - 5. persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to **40 CFR 82.156**; and
  - 6. owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to **40 CFR 82.166**; and,
- b. **40 CFR Part 82, Subpart B - “Servicing of Motor Vehicle Air Conditioners”**, if the facility maintains, services, repairs, or disposes of MVACs.

#### **A-27. Chemical Accident Prevention Provisions**

In accordance with **40 CFR Part 68.215 - “Permit Content and Air Permitting Authority or Designated Agency Requirements”**, any stationary source subject to the Chemical Accident Prevention Provisions of **40 CFR Part 68** shall comply with such provisions, including but not limited to the submittal of a Risk Management Plan (Subpart G) .

**A-28. Insignificant Activities**

The facility shall be operated in accordance with **MCAPCO Regulation 1.5508 - “Permit Content”, Subparagraphs (i)(15) and (i)(16)** such that all insignificant activities as defined in **MCAPCO Regulation 1.5503 - “Definitions”** shall be included in the permit and shall comply with any applicable requirement in MCAPCO.

**COMPLIANCE PROVISIONS**

**A-29. Duty to Comply with this Permit**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(3)**, noncompliance with any term, condition, or limitation of this permit is grounds for enforcement action; for permit termination, revocation and reissuance or modification; or for denial of a permit renewal application.

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(4)**, a Permittee shall not claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit as a defense in an enforcement action.

**A-30. Enforcement/Variations/Judicial Review**

Violation of any applicable MCAPCO regulation or condition listed herein could result in administrative fines and/or legal action as prescribed in **MCAPCO Section 1.5300 - “Enforcement; Variations; Judicial Review”**.

**A-31. Duty to Comply with Other Regulations**

This permit does not relieve the Permittee of the responsibility of complying with all applicable requirements of any Federal, State, or local water quality or land quality control authority.

**A-32. Determination of Compliance**

This permit contains provisions which require a specific test method, monitoring, or recordkeeping to be used as a demonstration of compliance with permit limits, but are not intended as the only means of demonstration or certifying compliance with permit limits. Unless otherwise specified, the averaging times for all specified emission standards are tied to or based on the run time of the test method(s) used for determining compliance. Compliance with MCAPCO, including the specific conditions herein, shall be determined by source testing, surveillance, visual observations, data review, plant inspections, and any other credible evidence.

**A-33. Compliance Certification**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Paragraph (n)**, the Permittee shall submit to MCAQ and EPA by April 30 of each year, a compliance certification by a responsible official with all terms and conditions in the permit, including emissions limitations, standards, or work practices. The certification shall specify:

- a. the identification of each term or condition of the permit that is the basis of the certification;
- b. the compliance status as shown by monitoring data and other information reasonably available to the Permittee;
- c. whether compliance was continuous or intermittent;
- d. the method(s) used for determining the compliance status of the source, currently and over the reporting period; and,
- e. such other facts as the permit may specify to determine the compliance status of the source.

The compliance certification shall identify each deviation and take it into account in the compliance certification. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the federal Clean Air Act.

All compliance certifications shall be submitted to MCAQ and the EPA at the following addresses:

Director	and	Environmental Protection Agency
Mecklenburg County Air Quality		Atlanta Federal Center
2145 Suttle Avenue		61 Forsyth Street, SW
Charlotte, North Carolina 28208-5237		Atlanta Georgia 30303-3104

In accordance with **MCAPCO Regulation 1.5520 - “Certification by Responsible Official”**, a responsible official shall certify the truth, accuracy, and completeness of the compliance certification. The certification shall state that, based on information and belief formed after reasonable inquiry, the statement and information in the document are true, accurate, and complete.

#### **A-34. Permit Shield**

In accordance with **MCAPCO Regulation 1.5512 - “Permit Shield and Application Shield”**, and pursuant to the terms, conditions, and limitations of this permit, the facility shall be deemed in compliance with all applicable requirements as of the date of permit issuance except as follows:

- a. This permit shield shall not apply to any change made at this facility that does not require a permit revision.
- b. This permit shield shall not extend to minor permit modifications made under **MCAPCO Regulation 1.5515 - “Minor Permit Modifications”**.
- c. Nothing in this permit shall alter or affect:
  - 1. the power of the Director, Mecklenburg County Air Quality under NCGS 143-215.112 or MCAPCO or EPA under Section 303 of the federal Clean Air Act;
  - 2. the liability of an owner or operator of a facility for any violation of applicable requirements prior to or at the time of permit issuance;
  - 3. the applicable requirements under Title IV; or
  - 4. the ability of MCAQ (or EPA under Section 114 of the federal Clean Air Act) to obtain information to determine compliance of the facility with its permit.

**A-35. Severability Clause**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(2)**, the provisions of this permit are severable. Upon any administrative or judicial challenge, or if any provision of this permit is held invalid, all permit requirements, except those being challenged, will remain valid and enforceable.

**A-36. Enforcement Clause**

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(3)**, noncompliance with any condition of the permit is grounds for enforcement action. In addition, noncompliance with any condition may result in permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

In accordance with **MCAPCO Regulation 1.5508 - “Permit Content” Subparagraph (i)(4)**, the Permittee may not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**B. LOCAL ONLY REQUIREMENTS**

Only Mecklenburg County Air Quality (MCAQ) has the authority to enforce the terms, conditions, and limitations contained in this section. The EPA does not have the authority to enforce the terms, conditions, and limitations contained in this section.

**B-1. Incorrect Information and Facility Operation**

This permit is subject to revocation or modification by MCAQ upon a determination that information contained in the application or presented in the support thereof is incorrect, conditions under which this permit was granted have changed, or violations of conditions contained in this permit have occurred. The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

**B-2. Violations Prior to Effective Permit Date**

This issuance of this permit in no way absolves the Permittee of liability for any potential legal action and/or penalties which may be assessed for violations of local regulations which have occurred prior to the effective date of this permit.

**B-3. Operation and Maintenance Reports**

Reports on the operation and maintenance of the facility shall be submitted by the Permittee to the Director, Mecklenburg County Air Quality at such intervals and in such form and detail as may be required by MCAQ. Information required in such reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and preventive maintenance schedules.



**B-4. Violation of Terms or Conditions**

A violation of any Locally enforceable term or condition of this permit shall subject the Permittee to enforcement pursuant to **MCAPCO Section 1.5300 - “Enforcement; Variances; Judicial Review”**, including assessment of civil penalties.

**B-5. Toxic Air Pollutants**

In accordance with **MCAPCO Section 1.5700 - “Toxic Air Pollutant Procedures”** and/or **MCAPCO Regulation 2.1104 - “Toxic Air Pollutant Guidelines”**, the toxic air pollutants (TAP) emitted by existing processes have been reviewed for regulatory applicability by MCAQ. If applicable, Appendix A lists the relevant permits and associated TAPs.

In accordance with **MCAPCO Regulations 1.5111 - “General Recordkeeping, Reporting and Monitoring Requirements”**, **2.0605 – “General Recordkeeping and Reporting Requirements”**, and/or **2.0903 - “Recordkeeping: Reporting: Monitoring”**, the facility shall report any process additions, modifications or deletions which affect the emissions of any TAP listed in **MCAPCO Section 1.5700 - “Toxic Air Pollutant Procedures”** as prescribed by the following:

- a. If the process modifications will result in a facility-wide TAP emission rate that exceeds the rate listed in **MCAPCO Regulation 1.5711 – “Emission Rates Requiring a Permit”** for any TAP, apply and receive an air toxics permit before the process modification occurs; or
- b. If the process modifications will result in facility-wide TAP emission rates that are below the rates listed in **MCAPCO Regulation 1.5711- “Emission Rates Requiring a Permit”**, submit the new emission rates to MCAQ 15 days prior to the initial change; or
- c. If the process modifications will not result in a net TAP emission increase, provide MCAQ with demonstration (15 days prior to the initial change) that the proposed modification will not result in a net TAP emission increase at the facility.

The facility is required to maintain documentation such that upon request by MCAQ, the facility can make a demonstration that facility-wide emissions of TAPs have or have not exceeded the rates listed in **MCAPCO Regulation 1.5711**.

**B-6. Nuisance**

The facility shall be operated in accordance with **MCAPCO Regulation 1.5109 - “Nuisance”**. The source shall not discharge any air contaminants or other material to cause injury, detriment, nuisance, annoyance, or endanger the comfort, repose, health or safety of the public or property.

**B-7. Odorous Emissions**

The facility shall be operated in accordance with **MCAPCO Regulation 1.5110 - “Control and Prohibition of Odorous Emissions”**. The owner or operator of a facility shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility’s boundary.

- If the Director determines that a source or facility is emitting an objectionable odor, the owner or operator shall be responsible for:
- providing the maximum feasible control determination according to the procedures in **MCAPCO Regulation 1.5113 - “Determination of Maximum Feasible Controls for Odorous Emissions”**, and
  - implementing maximum feasible controls for the control of odorous emissions.

**B-8. Start-up and Shut-down Excess Emissions Provisions**

In accordance with **MCAPCO Regulation 2.0535 – “Excess Emissions Reporting and Malfunctions”** Paragraph (g), excess emissions during start-up and shut-down shall be considered a violation, if the owner or operator cannot demonstrate that the excess emissions are unavoidable. The Director shall determine if excess emissions are unavoidable considering the items listed in this Regulation. The owner or operator shall operate the source and control and monitoring equipment in a manner to minimize emissions during start-up and shut-down.

**C. FEDERAL ONLY REQUIREMENTS**

Only the EPA has the authority to enforce the terms, conditions, and limitations contained in this section. Mecklenburg County Air Quality does not have the authority to enforce the terms, conditions, and limitations contained in this section.

-                                   THERE ARE NO FEDERAL ONLY REQUIREMENTS FOR THIS PERMIT -

# **PART 2**

## **Emission Source Conditions and Limitations**

## PART 2

### Emission Source Conditions and Limitations

In accordance with MCAPCO Section 1.5500-"Title V Procedures", the facility shall comply with all applicable rules and regulations whether or not these rules and regulations are specifically identified in the permit. The emission sources and control devices listed in the following table are subject to the Emission Source Conditions and Limitations contained in Part 2 as referenced in the table.

Emission Source ID	Emission Source Description (type, manufacturer and capacity)	Installation(I)/ Modification(M) Dates	Control Device ID	Control Device Unit or Method (type, model, manufacturer, installation/modification)	Emission Source Conditions and Limitations		
					Local and Federal Requirements	Local Only Requirements	Federal Only Requirements
ES-1 Meltshop Operations	EAF #510 - One 90 tph capacity, 16.5 ft. inside diameter steel shell, eccentric bottom tapping, AC, refractory-lined, water-cooled electric arc furnace.	(I) 1989, (M) 2004	BH-7  DES	Voest Alpine Industries, Inc. Model 1225 Series 125 Model 36-W6W6W reverse air, forced draft dust collector for controlling particulates from the melt shop. I = 2001  The Direct Evacuation System (DES) for CO control.	D-1, D-3, D-4, D-6, D-7, D-8, D-9, D-11, D-12, D-13, D-14	E-1, E-2, E-3	None
	Ladles and Tundishes including 5 ladle preheaters each rated at 6.0 million Btu/hr heat input and 3 tundish preheater burners each rated at 0.104 million Btu/hr heat input.	(I) 1989		None	D-2, D-7, D-8, D-14	E-1	None
	Dust Handling System	(I) 2001	BH-8	Griffin environmental, Inc. Model JV-54-4X dust collector to control particulate from the dust handling system for BH-7 (I) 2001	D-1, D-3, D-4, D-6, D-7, D-9, D-11, D-12, D-13, D-14	E-1, E-2, E-3	None

Emission Source ID	Emission Source Description (type, manufacturer and capacity)	Installation(I)/ Modification(M) Dates	Control Device ID	Control Device Unit or Method (type, model, manufacturer, installation/modification)	Emission Source Conditions and Limitations		
					Local and Federal Requirements	Local Only Requirements	Federal Only Requirements
ES-1 Meltshop Operations (Cont'd)	Two Carbon/Lime Silos: One 5,280 cf capacity One 5,000 cf capacity	(I) 1995 (I) 1980	BH-5, BH-6	Two Griffin Environmental Model JV-36-4X fabric filters for particulate emissions (one on each silo). BH-5 (I) 1995, BH-6 (I) 1998.	D-1, D-9, D-10, D-14	E-1	None
	Ancillary equipment consisting of: Porous Plug Inert Gas Injection System, Continuous Caster, Consteel Feed System, Bucket Charge Feed System, and Overhead Material Handling Equipment.	(I) 1989, (M-Consteel System) 2003	BH-7	BH-7 (see description above) for the Porous Plug Inert Gas Injection System. No control for other ancillary equip.	D-6, D-7, D-8, D-9, D-10, D-12, D-13, D-14	E-1, E-2, E-3	None
ES-2 Rolling Mill	One 115 million Btu/hr Billet Reheat Furnace located in the Rolling Mill.	(I) 1979		None	D-1, D-2, D-8, D-13, D-14	E-1	None
ES-3 Particulate Emissions	Particulate emissions from scrap handling and heavy vehicle traffic.  Consisting of: Scrap yard operations including scrap delivery via truck and scrap handling	(I)1979		None	D-1, D-14	E-1	None
IA-1	550 gallon above ground gasoline storage tank			None	None	E-1	None
IA-2	2,000 Gallon above ground Diesel Tank			None	None	E-1	None
IA-3	Three 9,000 Gallon above ground Oxygen Tanks			None	None	E-1	None
IA-4	7,500 Gallon above ground Caster Oil Tank			None	None	E-1	None
IA-5	330,000 Gallon above ground Water Surge Tank			None	None	E-1	None
IA-6	30,000 Gallon above ground Propane Tank			None	None	E-1	None

Emission Source ID	Emission Source Description (type, manufacturer and capacity)	Installation(I)/ Modification(M) Dates	Control Device ID	Control Device Unit or Method (type, model, manufacturer, installation/modification)	Emission Source Conditions and Limitations		
					Local and Federal Requirements	Local Only Requirements	Federal Only Requirements
IA-7	11,000 Gallon above ground Waste Oil Tank			None	None	E-1	None
IA-8	Twenty one (21) space heaters fired on natural gas (or propane during periods of natural gas curtailment)			None	None	E-1	None
IA-9	One indoor steel sandblasting operation			None	None	E-1	None
IA-10	One METCO/Sulzer Arc Welder/Spraying System in Roll Shop			None	None	E-1	None
IA-11	Rolling mill ventilation			None	None	E-1	None
IA-12	Parts Washers (solvent not subject to 40 CFR 63)			None	None	E-1	None
IA-14	100 kW (170 hp) diesel-fired emergency generator (Tier 3 certified).	I = 2013		None	D-5, D-14	E-1	None

### **ALTERNATIVE OPERATING SCENARIOS**

The following alternative operating scenarios (AOS) may be implemented by the facility without providing notification to MCAQ.

Emission Source ID	Emission Source Description	Alternative Operating Scenario No.	AOS Description	Emission Source Conditions and Limitations		
				Local and Federal Requirements	Local Requirements	Federal Requirements
ES-1 Meltshop Operations	<p><b>EA #510</b> - One 90 tph capacity, 16.5 ft. inside diameter steel shell, eccentric bottom tapping, AC, refractory-lined, water-cooled electric arc furnace.</p> <p><u>Control Devices:</u>  <b>BH-7:</b> Voest Alpine Industries, Inc. Model 1225 Series 125 Model 36-W6W6W reverse air, forced draft dust collector for controlling particulates from the melt shop.                      I = 2001</p> <p><b>DES:</b> The Direct Evacuation System (DES) for CO control.</p>	AOS #1	<p>When necessary, the dust collector BH-7 may be operated using only one of the existing two fans during which time the following parameters shall be met:</p> <p>The operating fan shall run at an increased workload ranging from 140 Amps to 190 Amps;</p> <p>The damper to the disabled fan shall be closed; and</p> <p>The damper to the operating fan shall be open and adjusted to a range of 45% to 63%.</p>	D-1, D-3, D-4, D-6, D-7, D-8, D-9, D-11, D-12, D-13, D-14	E-1, E-2, E-3	None

**NOTE:** If an alternative operating scenario includes construction or installation of new equipment (equipment not currently on-site), the new equipment will be subject to MCAPCO Regulation 1.5232- "Issuance, Revocation, and Enforcement of Permits" Subparagraph (a)(5) which states in part: if "construction of the permitted equipment does not commence within 18 months of permit issuance or once construction has begun, it ceases prior to completion for a period of 18 consecutive months", the permit may be revoked or modified.

## **EMISSION SOURCE CONDITIONS AND LIMITATIONS**

### **D. LOCAL AND FEDERAL REQUIREMENTS**

Mecklenburg County Air Quality (“MCAQ”) and the United States Environmental Protection Agency (“EPA”) have the authority to enforce the terms, conditions, and limitations contained in this section.

- D-1. The facility shall be operated in accordance with **MCAPCO Regulation 2.0515 - “Particulates from Miscellaneous Industrial Processes”**, such that particulate emissions from any stack, vent or outlet shall not exceed the allowable emission rate. The allowable emission rate shall be determined using the appropriate formula below:

$E = 4.10 * P^{0.67}$ <p>For process weight rates greater than 30 tons/hr the following formula shall be used:</p> $E = 55.0 * P^{0.11} - 40$
<p>E = maximum allowable emission rate for particulate matter in lbs/hr                      P = process rate in tons/hr</p>

- D-2. The facility shall be operated in accordance with **MCAPCO Regulation 2.0516 - "Sulfur Dioxide Emissions from Fuel Burning Installations"**, such that sulfur dioxide emissions from any vent, stack or chimney shall not exceed 2.3 pounds per million Btu input.
- D-3. The facility shall be operated in accordance with **MCAPCO Regulation 2.1111 - “Maximum Achievable Control Technology”** and **40 CFR Part 63 - “National Emission Standards For Hazardous Air Pollutants For Source Categories”**. The requirements are stated in **40 CFR 63.1 to 63.15 Subpart A - “General Provisions”**, and **40 CFR 63.10680 to 63.10692 Subpart YYYYYY - “National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities”**, including but not limited to:
- A. **63.10680 - “Am I subject to this subpart”**
  - B. **63.10681 - “What are my compliance dates”**
  - C. **63.10685 - “What are the requirements for the control of contaminants from scrap”**  
*Portions of this section require owners or operators to develop scrap management plans to control emissions of chlorinated plastics, lead, free organic liquids and mercury. The facility is required to submit the plans to MCAQ for approval by June 30, 2008 and to operate the facility according to the plans submitted.*
  - D. **63.10686 - “What are the requirements for electric arc furnaces and argon-oxygen decarburization vessels”**  
*Portions of this Section require all affected facilities to meet the following standards:*
    - (1) *particulate emissions from a control device shall be less than 12 mg/dscm (0.0052 gr/dscf);*
    - (2) *opacity shall be less than 6% from the shop due solely to the operations of any affected EAF*
  - E. **63.10690 - “What are the parts of the general provisions that apply to this subpart”**
  - F. **63.10691 - “Who implements and enforces this subpart”**
  - G. **63.10692 - “What definitions apply to this subpart”**



- D-4. The facility shall be operated in accordance with **MCAPCO 2.0524 - "New Source Performance Standards"**. The requirements are stated in **40 CFR 60.1 to 60.19 - "General Provisions"**, and **40 CFR 60.270a to 60.276a, Subpart AAa - "Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed after August 7, 1983"**, including but not limited to:
- A. **60.270a - "Applicability and designation of affected facility"**
  - B. **60.271a - "Definitions"**
  - C. **60.272a - "Standard for particulate matter"**  
*Portions of this Section require all affected facilities to meet the following standards:*
    - (1) *particulate emissions from a control device shall be less than 12 mg/dscm (0.0052 gr/dscf);*
    - (2) *opacity shall be less than 3% from a control device;*
    - (3) *opacity shall be less than 6% from the shop due solely to the operations of any affected EAF; and,*
    - (4) *opacity shall be less than 10% from the dust handling system.*
  - D. **60.273a - "Emission monitoring"**  
*Refer to 60.273a and Emission Source Condition and Limitation No.D-9 for monitoring requirements.*
  - E. **60.274a - "Monitoring of operations"**  
*Refer to 60.274a and Emission Source Condition and Limitation No.D-9 for monitoring requirements.*
  - F. **60.275a - "Test methods and procedures"**  
*Refer to 60.275a and Emission Source Condition and Limitation Nos. D-12 and D-13 for testing requirements.*
  - G. **60.276a - "Recordkeeping and recording requirements"**  
*Refer to 60.276a and Emission Source Condition and Limitation No. D-14 for reporting requirements*
- D-5. The facility shall be operated in accordance with **MCAPCO Regulation 2.0524 - "New Source Performance Standards"**. The requirements are stated in **40 CFR 60.1 to 60.19, Subpart A - "General Provisions"**, and **40 CFR 60.4200 to 60.4219, Subpart IIII - "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines"** ("CI ICE") which includes the following pertinent sections:
- A. **60.4200 - "Am I subject to this subpart?"**
  - B. **60.4204 - "What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI ICE?"**  
*Portions of this Section require that the owner or operator of an affected source comply with the emission standards specified in this subpart depending on model year and size of the non-emergency engine/generator.*
  - C. **60.4205 - "What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI ICE?"**  
*Portions of this Section require that the owner or operator of an affected source comply with the emission standards specified in this subpart depending on model year and size of the emergency engine/generator.*
  - D. **60.4206 - "How long must I meet the emission standards if I am an owner or operator of a stationary CI ICE?"**  
*Portions of this Section require that the owner or operator of an affected source must comply with the emission standards of this subpart over the entire life of the engine.*
  - E. **60.4207 - "What fuel requirements must I meet if I am an owner or operator of a stationary CI ICE subject to this subpart?"**  
*Portions of this Section require that the owner or operator of an affected source must, beginning October 1, 2007, use diesel fuel that meets the requirements of 40 CFR 80.510(a), which in turn requires the fuel sulfur content be less than 500 ppm. Beginning October 1,*

*2010, owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, which in turn requires the fuel sulfur content be less than 15ppm.*

- F. **60.4208 – “What is the deadline for importing or installing stationary CI ICE produced in the previous model year?”**  
*Portions of this Section establish the deadline by which a previous model year CI ICE may be installed for each year for which an emission standard is established in this subpart.*
- G. **60.4209 - “What are the monitoring requirements if I am an owner or operator of a stationary CI ICE?”**  
*Refer to 60.4209 and Emission Source Condition and Limitation No. D-9 of this permit for monitoring requirements.*
- H. **60.4211 - “What are my compliance requirements if I am an owner or operator of a stationary CI ICE?”**  
*Portions of this section specify the compliance options for an owner or operator of an affected source depending on model year and size of the engine.*
- I. **60.4212/60.4213 - “What test methods and other procedures must I use if I am an owner or operator of a stationary CI ICE with a displacement of less than 30 liters per cylinder (60.4212)/greater than or equal to 30 liters per cylinder (60.4214)?”**  
*Refer to 60.4212/4213 and Emission Source Condition and Limitation No. D-13 of this permit for testing requirements.*
- J. **60.4214 - “What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI ICE?”**  
*Refer to 60.4214 and Emission Source Condition and Limitation No. D-14 of this permit for reporting and recordkeeping requirements.*

D-6. The facility shall be operated in accordance with **MCAPCO Regulation 2.0530 - “Prevention of Significant Deterioration.”** The following production limitations shall not be exceeded:

- A. short term hourly production shall not exceed 90 billet tons of steel per hour (24 hr avg, 7:00AM to 7:00AM). For any day in which the furnace is shut down and not restarted (i.e. a short-production day) the facility may add 90 minutes to the actual furnace operating time for the period, strictly for calculating this hourly rate.
- B. average annual hourly production shall not exceed 75 billet tons of steel per hour; and,
- C. annual production shall not exceed 575,000 billet tons of steel per year.

D-7. In accordance with **MCAPCO Regulation 2.0530 – “Prevention of Significant Deterioration”**, emissions from the meltshop including EAF No. 510, Porous Plug Inert Gas Injection System, Continuous Caster, Consteel Feed system, Bucket Charge Feed System and Overhead Material Handling Equipment shall not exceed the following emission rates:

Pollutant	Emission Limit (lbs/billet ton of steel)	Emission Limit (tons/year - rolling 12 month periods)
CO	4.4	1,265
VOC	0.34	97.8
NO <sub>x</sub>	0.20	57.5
SO <sub>2</sub>	0.16	46.0

Pollutant	Emission Limit (lbs/billet ton of steel)	Emission Limit (tons/year - rolling 12 month periods)
PM <sub>10</sub> Filterable	0.05	14.3
PM <sub>10</sub> Filterable + Condensable	0.24	69

- D-8. The facility shall be operated in accordance with **MCAPCO Regulation 1.5236 - “Synthetic Minor Facilities”**, such that facility-wide emissions during any consecutive 12-month period shall be less than:
- ▶ 100 tons for the following pollutant(s): NO<sub>x</sub> and VOC; and,
  - ▶ The maximum emissions of nitrogen oxides (NO<sub>x</sub>) from all sources at the facility shall be less than 560 pounds per calendar day beginning May 1 through September 30 of any year.

Emissions for the above-referenced pollutant(s) shall be determined using one or more of the following methods as applicable:

1. Emission rates and control efficiencies obtained through MCAQ-approved emission source testing;
2. Material (mass) balance based on product usage;
3. Emission factors or rates found in the latest edition of the “Compilation of Air Pollutant Emission Factors”, EPA document AP-42;
4. Other emission factors or rates as approved by MCAQ.

The emissions limitation was requested by the facility to preclude a categorical determination as a “major facility” and the requirements of **MCAPCO Section 2.0900 – “Volatile Organic Compounds”** and/or **Section 2.1400 – “Nitrogen Oxides”**.

- D-9. In accordance with **MCAPCO Regulations 1.5111 - General Recordkeeping, Reporting and Monitoring Requirements 2.0605 – “General Recordkeeping and Reporting Requirements** and **40 CFR Part 64 - "Compliance Assurance Monitoring"**, the facility shall monitor and record the following operating parameters for the emission sources and control devices as listed below:

Equipment	Operating Parameter	Indicator Range	Minimum Frequency	
			Data Measurement	Data Recording
EAF No. 510 (ES-1)	Furnace static pressure	≤ -0.18 in. of H <sub>2</sub> O	Continuous	1 x Hour
Fabric Filter (BH-7)	Pressure drop across the baghouse compartment and total baghouse via fixed manometer	3.0-8.0 in. of H <sub>2</sub> O	Continuous	1 x Hour
	Baghouse inlet temperature via fixed thermocouple	≤ 275° F.		
	Fan No. 1 amperage via fixed amp measurement device	116-164 amperes		
	Fan No. 2 amperage via fixed amp measurement device	116-165 amperes		
	Damper position via fixed damper position measurement device	30-60% (Fan No. 1) 30-61% (Fan No. 2)		

Equipment	Operating Parameter	Indicator Range	Minimum Frequency	
			Data Measurement	Data Recording
AOS #1 Fabric Filter (BH-7) – only one fan in operation	Pressure drop across the baghouse compartment and total baghouse via fixed manometer	3.0-8.0 in. of H <sub>2</sub>	Continuous	1 x Hour
	Baghouse inlet temperature via fixed thermocouple	≤ 275° F.		
	Operating Fan amperage via fixed amp measurement device	140 - 190 amperes		
	Damper position via fixed damper position measurement device	45-63% (Operating Fan) Closed (Disabled Fan)		
Fabric Filter (BH-8)	Pressure drop across the baghouse via fixed manometer	0.25-4.0 in. of H <sub>2</sub> O	Continuous	1 x shift
Fabric Filters on Lime Silos (BH-5, BH-6)	Visual inspections during silo filling. Record observations and any actions taken if visible emissions are observed.	Visible Emissions	Once per month during silo loading	1 x Month
40 CFR 60 (NSPS Subpart AAa) emission sources	Refer to <b>40 CFR 60.273a and 60.274a</b> for specific monitoring requirements related to NSPS emission sources		Refer to <b>40 CFR 60.273a and 60.274a</b>	
40 CFR 60 (NSPS Subpart IIII) emission sources	Refer to <b>40 CFR 60.4209</b> for specific monitoring requirements related to NSPS emission sources		Refer to <b>40 CFR 60.4209</b>	
40 CFR 63 Subpart YYYYY emission sources	<b>Refer to 40 CFR 63.10686e</b> for specific monitoring requirements related to 40 CFR 63 emission sources		<b>Refer to 40 CFR 63.10686e</b>	

Recorded measurements either above or below the above-listed indicator ranges during facility operation shall be determined to be an excursion and shall be reported semiannually.

The facility shall maintain the above-specified operating records as well as any maintenance records for activity conducted on the equipment for a period of not less than 5 years, unless otherwise specified by the permit. The records shall be available for inspection by MCAQ personnel upon request.

- D-10. The two carbon/lime silos and the porous plug inert gas injection system shall be operated concurrently with the associated control device(s) specified in this Permit to Construct/Operate except when subject to the provisions of **MCAPCO Regulation 2.0535 - “Excess Emissions Reporting and Malfunctions”**. The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution.
- D-11. The EAF No. 510 and dust handling system shall be operated concurrently with the associated control device(s) specified in this Permit to Construct/Operate except when:
- A. subject to the malfunction provisions contained in the **General Provisions of New Source Performance Standards, Subpart A (40 CFR**

**Part 60.1-60.19); or,**

B. as specified in **Subpart AAa (40 CFR 60.120a to 60.276a)**, and,

C. subject to the malfunction provisions contained in the **General Provisions of National Emission Standards, Subpart A (40 CFR 63.6e)**; or,

D. as specified in **Subpart YYYYY (40 CFR 63.10680 to 63.10692)**,

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution.

- D-12. The facility shall be operated in accordance with **MCAPCO Regulation 2.0501 – “Compliance with Emission Control Standards”, 40 CFR 60.275a - "Test methods and procedures" and 40 CFR 63.10686 - "What are the requirements for electric arc furnaces and argon-oxygen decarburization vessels"**. The owner or operator of the emission source shall, within 60 days of achieving maximum capacity, but no later than 180 days after initial startup of such facility, and at such other times as may be required by the Administrator of the USEPA or MCAQ under Section 114 of the Act, conduct performance test(s) to demonstrate compliance with the emission rates given in Emission Source Condition and Limitation D-7 above and furnish the MCAQ a written report of the results of such performance test(s). Tests shall be conducted using the most recent versions of the test methods contained in **40 CFR Part 60 Appendix A** or as approved by the Administrator of the USEPA or MCAQ.

All performance tests shall be made by, or under the direction of, a person qualified by training and/or experience in the field of air pollution testing. MCAQ shall be notified at least 60 days in advance of the proposed test so that it may have a representative present to observe the test at its option. The notification shall include a detailed description of the test procedures so that MCAQ may review and approve them. The final test results shall be submitted to MCAQ for review within 60 calendar days after completion of on-site testing. The performance test(s) specified in this condition do not preclude MCAQ from requesting performance testing for other emission sources or for other purposes as defined in **MCAPCO Regulation 1.5104 - “General Duties and Powers of the Director, With the Approval of the Board”**, and referenced in Facility Condition and Limitation No. A-3 of this Permit.

- D-13. Performance testing shall be required for verification of the emission rates every 5 years in conjunction with the request for renewal applications to be submitted as required for renewal of this Title V Air Quality Permit. The tests shall be completed prior to submittal of the renewal applications. Testing for CO may be performed based on three consecutive 24-hour average periods as requested in order to allow for representative heat variations. In order to ensure accurate emission estimates, emission rates from the most recent stack testing event shall be used to calculate actual emissions.
- D-14. The facility shall be operated in accordance with **MCAPCO Regulation 1.5111 - “General Recordkeeping, Reporting, and Monitoring Requirements”, 2.0605 – “General Recordkeeping and Reporting Requirements”, and/or 2.0903 - “Recordkeeping, Reporting, Monitoring” and MCAPCO Regulation 1.5508 - “Permit Content”**, such that the following specific reports and/or notifications shall be submitted to MCAQ by the specified dates:

### (1) NOTIFICATIONS TO MCAQ

POLLUTANT/ PARAMETER	NOTIFICATION REQUIREMENT	SUBMITTAL DATES
Performance test notification report	Detailed description of the proposed test procedures to be used	30 days prior to proposed test date
Emergency Generator(s)	Emergency generator(s) operating for <u>more</u> than 500 hours for the calendar year, provide the anticipated number of operating hours and fuel usage for the remaining months of the calendar year.	Within 15 days after exceedance
NO <sub>x</sub> and VOC	Submit notification upon exceedance of the synthetic minor emission limitations specified in <b>Emission Source Condition and Limitation No. D-8.</b>	Within 2 business days of the exceedance discovery
<b>40 CFR 60 Subpart AAa</b> emission sources	Refer to <b>40 CFR 60.7</b> and <b>60.276a</b> and <b>Emission Source Condition and Limitation No. D-4</b> of this permit for notification requirements.	Refer to <b>40 CFR 60.7</b> and <b>60.276a.</b>
<b>40 CFR 60 Subpart IIII</b> emission sources	Refer to <b>40 CFR 60.7</b> and <b>60.4214</b> and <b>Emission Source Condition and Limitation No. D-5</b> of this permit for notification requirements.	Refer to <b>40 CFR 60.7</b> and <b>60.4214.</b>
<b>40 CFR 63 Subpart YYYYY</b> emission sources	Refer to <b>40 CFR 63.9, 63.10685, and 63.10686</b> <b>Emission Source Condition and Limitation No. D-3</b> of this permit for notification requirements.	Refer to <b>40 CFR 63.9, 63.10685, and 63.10686</b>

### (2) REPORTS TO MCAQ

POLLUTANT/ PARAMETER	REPORTING REQUIREMENT	EMISSION PERIOD (For previous)	SUBMITTAL DATES (Postmarked by)
TSP PM (PM <sub>10</sub> /PM <sub>2.5</sub> ) SO <sub>2</sub> NO <sub>x</sub> CO VOC	<p>A report of facility-wide monthly emissions (in tons) emanating from the emission sources listed on this permit to include, at a minimum, the following information:</p> <ol style="list-style-type: none"> <li>1. All supporting documentation, including emission calculations. (Calculations for previously submitted periods do not need to be re-submitted)</li> <li>2. Monthly billet tons of steel produced</li> <li>3. Monthly hours of operation for each emission source</li> <li>4. Type and amount of fuel used at each fuel combustion source</li> <li>5. Fuel analysis report indicating the sulfur content in the fuel oil used on-site</li> <li>6. Monthly weight (tons) of steel processed by the reheat furnace</li> <li>7. Monthly weight (tons) of scrap processed</li> <li>8. Monthly number of vehicle miles traveled for slag trucks</li> <li>9. Monthly weight (lbs or tons) of collected dust for the dust handling system</li> <li>10. Monthly weight (lbs or tons) of carbon/lime loaded into each silo.</li> </ol>	Calendar year	April 30 of following year

<b>POLLUTANT/ PARAMETER</b>	<b>REPORTING REQUIREMENT</b>	<b>EMISSION PERIOD (For previous)</b>	<b>SUBMITTAL DATES (Postmarked by)</b>
Title V Monitoring Reports ( <b>MCAPCO 1.5508</b> )	Submit a report, certified by a responsible company official, of all required monitoring parameters as found in Facility Condition and Limitation No. A-16 and Emission Source Condition and Limitation No. D-9. The report should include a discussion of monitoring excursions.	6 months	April 30 October 30
Performance Test Report	Results of Performance Test Conducted	Not applicable	Within 60 days after test
Emergency Generator(s)	Number of hours operated and amount of fuel used for each emergency generator for the calendar year	Calendar year	April 30 of following year
<b>40 CFR 60 Subpart AAa</b> emission sources.	Refer to <b>40 CFR 60.7, 60.276a</b> and <b>Emission Source Condition and Limitation No. D-4</b> of this permit for reporting requirements	Refer to <b>40 CFR 60.7</b> and <b>60.276a</b> .	
<b>40 CFR 60 Subpart IIII</b> emission sources.	Refer to <b>40 CFR 60.7, 60.4214</b> and <b>Emission Source Condition and Limitation No. D-5</b> of this permit for reporting requirements	Refer to <b>40 CFR 60.7</b> and <b>60.4214</b> .	
<b>40 CFR 63 Subpart YYYYYY</b> emission sources	Refer to <b>40 CFR 63.10, 63.10685, and 63.10686</b> and <b>Emission Source Condition and Limitation No. D-3</b> of this permit for reporting requirements	Refer to <b>40 CFR 63.10, 63.10685, and 63.10686</b>	

### (3) COMPLIANCE CERTIFICATION TO BOTH EPA AND MCAQ

<b>PARAMETER</b>	<b>REPORTING REQUIREMENT</b>	<b>EMISSION PERIOD (For previous)</b>	<b>SUBMITTAL DATE (Postmarked by)</b>
Certification by Responsible Official	Identify each term and condition of the Permit and the facility's compliance status for each as described in Facility Condition and Limitation No. A-33.	Calendar year	April 30 of the following year

### **E. LOCAL ONLY REQUIREMENTS**

Only Mecklenburg County Air Quality has the authority to enforce the terms, conditions and limitations contained in this section. The EPA does not have the authority to enforce the terms, conditions and limitations contained in this Section.

E-1. Permit No. 14-01V-567 shall be void upon issuance of this Permit.

E-2. In accordance with **MCAPCO Regulations 1.5711 – “Emission Rates Requiring a Permit”** and/or **2.1104 – “Toxic Air Pollutant Guidelines”**, the facility shall not emit any of the following toxic air pollutants in such quantities that may cause or contribute beyond the premises to any significant ambient air concentration that may adversely affect human health:

Arsenic and inorganic arsenic compounds  
 Cadmium  
 Manganese and Compounds  
 Mercury Vapor  
 Chrome (+6)  
 Hexachlorodibenzo-p-dioxin  
 Tetrachlorodibenzo-p-dioxin

A. To comply with these requirements, the facility shall be operated in accordance with the following limitation(s):

Annual production shall not exceed 575,000 billet tons of steel per year

The facility shall maintain a record of the above-specified parameter(s) for a period not less than two (2) years. The records shall be made available to MCAQ personnel upon request.

B. Parameters of the air dispersion modeling demonstration (**BH-7**):

Parameter	Value
Stack height	= 31.1 m (102 ft)
Stack diameter	= 3.66 m (12.01 ft)
Stack Orientation	= Vertical having no rain cap
Stack exit temperature	$\geq 337^{\circ} \text{ K}$ (146.9° F)
Stack exit velocity	$\geq 1.69 \text{ m/sec}$ (332.67 ft/min)
Arsenic and inorganic arsenic compounds emission rate	$\leq 2.862 \times 10^{-5} \text{ g/sec}$ (1.99 lbs/yr)
Cadmium emission rate	$\leq 5.228 \times 10^{-4} \text{ g/sec}$ (36.35 lbs/yr)
Manganese and compounds emission rate	$\leq 6.847 \times 10^{-3} \text{ g/sec}$ (1.30 lbs/day)
Mercury vapor emission rate	$\leq 0.0104 \text{ g/sec}$ (1.98 lbs/day)
Chrome (+6) emission rate	$\leq 2.84 \times 10^{-2} \text{ g/sec}$ (5.4 lbs/day)
Hexachlorodibenzo-p-dioxin emission rate	$\leq 3.05 \times 10^{-5} \text{ g/sec}$ (2.12 lbs/yr)
Tetrachlorodibenzo-p-dioxin emission rate	$\leq 1.20 \times 10^{-6} \text{ g/sec}$ (0.0834 lbs/yr)



C. Parameters of the air dispersion modeling demonstration **(BH-8)**:

Parameter	Value
Stack height	= 23.5 m (77.1ft)
Stack diameter	= 0.45 m (1.48 ft)
Stack Orientation	= Horizontal
Stack exit temperature	$\geq 443^{\circ} \text{ K (337}^{\circ} \text{ F)}$
Stack exit velocity	$\geq 1.69 \text{ m/sec (332.67 ft/min)}$
Arsenic and inorganic arsenic compounds emission rate	$\leq 5.60230 \times 10^{-7} \text{ g/sec (0.04 lbs/yr)}$
Cadmium emission rate	$\leq 1.02359 \times 10^{-5} \text{ g/sec (0.71 lbs/yr)}$
Manganese and compounds emission rate	$\leq 1.34045 \times 10^{-4} \text{ g/sec (0.03 lbs/day)}$
Mercury vapor emission rate	$\leq 1.09259 \times 10^{-4} \text{ g/sec (0.02 lbs/day)}$
Chrome (+6) emission rate	$\leq 9.037 \times 10^{-7} \text{ g/sec (0.000172 lbs/day)}$

Upon written request from MCAQ, the facility shall verify compliance with the above-specified modeling parameters and operating conditions.

**NOTIFICATION AND REPORTING REQUIREMENTS**

E-3. The facility shall be operated in accordance with **MCAPCO Regulation 1.5111 - “General Recordkeeping, Reporting, and Monitoring Requirements”**, **2.0605 – “General Recordkeeping and Reporting Requirements”**, and/or **2.0903 - “Recordkeeping, Reporting, Monitoring”** and **MCAPCO Regulation 1.5508 - “Permit Content”**, such that the following specific reports and/or notifications shall be submitted to MCAQ by the specified dates:

POLLUTANT/ PARAMETER	REPORTING REQUIREMENT	SUBMITTAL DATE
Arsenic and inorganic arsenic compounds Cadmium Manganese and Compounds Mercury Vapor Chrome (+6) Hexachlorodibenzo-p-dioxin Tetrachlorodibenzo-p-dioxin	A report of facility-wide emissions (in lb) emanating from the emission sources listed on this permit to include, at a minimum, the following information:  1. Emission calculations including all supporting documentation. (Calculations for previously submitted periods do not need to be re-submitted.)  2. Number of days ES-1 Melt Shop (EAF, Dust Handling System, and Gas Injection System) operated during the calendar year.	April 30 of the following year

**F. FEDERAL ONLY REQUIREMENTS**

Only the EPA has the authority to enforce the terms, conditions, and limitations contained in this section. Mecklenburg County Air Quality does not have the authority to enforce the terms, conditions, and limitations contained in this Section.

- THERE ARE NO FEDERAL ONLY REQUIREMENTS FOR THIS PERMIT-



## APPENDIX A: TOXIC AIR POLLUTANT REVIEW

Facility Name: Gerdau Long Steel North America – Charlotte Mill

Facility Address: 6601 Lakeview Road, Charlotte NC

Date Issued: April 20, 2016

As a result of a process modification or SIC call, the above-referenced facility has been reviewed for toxic air pollutant emissions under **MCAPCO Regulation 1.5700 – “Toxic Air Pollutant Procedures”** and been found to emit the following substances:

Reviewed Toxic Air Pollutant (TAP)	CAS No.	Toxic Permit Emission Rate (TPER) as listed in MCAPCO Regulation 1.5711 - “Emission Rates Requiring a Permit”				Is TAP also a Hazardous Air Pollutant (HAP)?	Compliance Demonstration Method	
		lb/ year	lb/ day	lb/ hour	lb/ hour		Actual emission rate below TPER?	Air Dispersion Modeling Conducted?
arsenic & inorganic arsenic compounds	-	0.016				Y	N	Y
Benzene	71-43-2	8.1				Y	Y	N
beryllium & compounds	-	0.28				Y	Y	Y
cadmium & compounds	-	0.37				Y	N	Y
Formaldehyde	50-00-0				0.04	Y	Y	N
manganese & compounds	-		0.63			Y	N	Y
mercury vapor	7439-97-6		0.013			N	N	Y
nickel metal	7440-02-0		0.13			N	Y	Y
non-specific chromium (VI) compounds, as chromium (VI) equivalent	-	0.0056				N	N	Y
soluble chromate compounds, as chromium (VI) equivalent	-		0.13			N	Y	N
hexachlorodibenzo-p-dioxin	57653-85-7	0.0051				N	N	Y
tetrachlorodibenzo-p-dioxin	1746-01-6	0.0002				N	N	Y

## **ATTACHMENT 1**

### **COMMONLY USED ABBREVIATIONS AND ACRONYMS**

BACT	Best Available Control Technology
Btu	British Thermal Unit
CAAA	Clean Air Act Amendments
CAM	Compliance Assurance Monitoring
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
CO	Carbon Monoxide
EPA	Environmental Protection Agency
HAP	Hazardous Air Pollutant
HCFC	Halogenated ChloroFluoroCarbon
MACT	Maximum Achievable Control Technology
MCAPCO	Mecklenburg County Air Pollution Control Ordinance
MCAQ	Mecklenburg County Air Quality
million Btu	Million British Thermal Units
MVAC	Motor Vehicle Air Conditioner
MW	Megawatt
NCGS	North Carolina General Statute
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter less than 10 micrometers
PSD	Prevention of Significant Deterioration
RACT	Reasonable Available Control Technology
RMP	Risk Management Plan
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
TAP	Toxic Air Pollutant
VOC	Volatile Organic Compound